CLAIMS

1. A COS treatment apparatus for a gasified gas containing H_2S, H_2O, O_2, and CO, which comprises an O_2 removal catalyst and a COS conversion catalyst located on the downstream side of a gasified gas flow with respect to said O_2 removal catalyst.

2. The COS treatment apparatus according to claim 1, wherein said O_2 removal catalyst is a TiO_2 catalyst carrying Cr_2O_3 or NiO.

3. A COS treatment apparatus for a gasified gas containing H_2S, H_2O, O_2, and CO, which comprises a TiO_2 catalyst carrying Cr_2O_3.

4. The COS treatment apparatus according to claim 1, wherein said O_2 removal catalyst is located in a higher-temperature region with respect to said COS conversion catalyst.

5. A COS treatment method for a gasified gas containing H_2S, H_2O, O_2, and CO, which comprises a first step of removing O_2 by reaction with H_2S and CO, and a second step of converting COS to H_2S.

6. The COS treatment method according to claim 5, wherein a TiO_2 catalyst carrying Cr_2O_3 or NiO is used in said first step.

7. The COS treatment method according to claim 5, wherein a TiO_2 catalyst carrying Cr_2O_3 is used.

8. The COS treatment method according to claim 5, wherein said first step is performed at a higher temperature with respect to said second step.